

# South Texas Weather Journal

Fall/Winter 2005

Serving the Coastal Bend, Rio Grande Plains, and Victoria Crossroads

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# Severe Thunderstorm Causes Damage in South Texas

by: Jason Runyen

On Thursday, October 27th, 2005 some residents across portions of South Texas found themselves seeking safe cover as a severe thunderstorm with damaging winds and hail swept through the area. The severe thunderstorm began near Zavala and Frio County during the afternoon and tracked over 150 miles to the southeast across South Texas. Along this track the storms intensified across Duval County then moved into far southern Jim Wells County, producing extensive wind damage. The towns of La Rosita and San Jose, as well as areas near Premont were the hardest hit. Over 30 homes sustained significant damage, two mobile



**Above:** Mobile home destroyed by severe thunderstorm winds. Three people inside survived.

homes destroyed and numerous trees uprooted. One mobile that was completely destroyed had three people in it, with all surviving! AEP crews reported replacing nearly 100 power poles that had been snapped from the winds. A NWS team surveyed the area the next day and concluded the damage was the result of straight-line winds of 80 to 100 mph, though an isolated tornado embedded in the storm could not be ruled out. Eye witness reports indicate that nickel to quarter sized hail covered the ground 4 to 6 inches deep during the storm. The NWS team found drifts of this hail still remaining on the ground nearly 20 hours later! Fortunately no serious injuries or fatalities were reported.

# **Smoke Detector for Weather?**

by: Tony Merriman



**Above:** Arial photo of damage at a trailer park from an F3 tornado near Evansville, IN. The storm killed 23 people during the middle of the night.

During the early morning hours of November 6th, 2005 a tornado touchdown near Evansville, Indiana tragically killing 23 people and injuring nearly 200 more. Most people in the path of this destructive tornado never heard the warnings relayed by community sirens or by television because they were sound asleep.

How can you be warned of severe weather late at night while you are in a deep sleep? What about the smoke detector for weather: NOAA Weather Radio. When a NWS forecaster issues a warning for severe weather these radios will issue a very loud alarm, waking a person from sleep and giving them the time they need to take action and protect their lives and the lives of their family. Newer versions of these radios

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The snow at Corpus Christi was the first measurable snow since 1973 and the first at Victoria since 1985.

The 2004 storm was the second white Christmas in recorded history at Corpus Christi and the first for Victoria.

Extreme northeast Mexico received between 1 and 3 inches of snow, which was likely the first ever White Christmas experienced in this part of Mexico in recorded history.

# **Christmas Miracle**

by: Jason Runyen

South Texans were treated to an extremely rare snow event Christmas Eve and Christmas morning of 2004. Residents awoke Christmas morning to snow blanketing the area from the Rio Grande to the Gulf Coast. For some younger native South Texans this was their first experience with the white stuff. What caused the snowfall? The combination of cold arctic airmass entrenched across the region and a strong upper level low moving out of northern Mexico and through South Texas partially led to the White Christmas.

The heaviest snow fell in band from Alice to Beeville to Victoria to Bay City, where 9 to 13 inches of snowfall was recorded.

Locations stretching from Corpus Christi to Port O'Connor to Galveston, closer to the coast, recorded anywhere from 4 to 8 inches of snowfall. Locations south and west, from Laredo to McAllen to Brownsville to South Padre Island measured 1 to 3 inches of snowfall.



**Above:** Front of the National Weather Service Forecast Office in Corpus Christi, TX on Christmas morning.

# DID YOU KNOW? (WINTER WEATHER EDITION)

cold enough to actually freeze. This will result in a loss of feeling, or a white appearance in extremities such as fingers, toes, earlobes, and the tip of your nose.

temperature drops below 95 degrees F causing the person to become disoriented, confused, and shiver uncontrollably. These symptoms could eventually lead to drowsiness and exhaustion and in some cases death.

In both cases, seek medical attention quickly. If help is not immediately available, slowly warm the core of the body first. Get the person into dry clothing, and wrap them in a blanket. Failure to recognize or treat these symptoms could result in death.

# Winter Weather Awareness Day

by: John Metz

December 6th is designated as Winter Weather Awareness Day in Texas. And although winter precipitation is a rare occurrence in south Texas occurring on average about once every 8 years, prolonged cold snaps are more common. Because cold temperatures can be extremely dangerous we urge all south Texans to take this time to review a few simple safety rules. During cold weather dress appropriately. Because trapped air insulates, wear several layers of loose fitting, light weight clothing. Layers can be removed to avoid perspiration and subsequent chill. Outer garments should be tightly woven, water repellent, and hooded. Wear a hat. Significant body heat loss can occur from the head. Cover your mouth to protect your lungs from extreme cold. Mittens that are snug at the wrist are better than gloves. Try to stay dry. Failure to follow steps above could result in Frostbite, Hypothermia or even death.

# **How to Measure Snow**

by: Steve Smart

It's that time of year again when observers across the country prepare for winter season storms and measuring snow. In south Texas, snow measurements are rarely taken. However, Christmas 2004 demonstrated that measurable amounts of snow can occur! Here are some basic things to remember regarding snow measurements.

Prior to the onset of snow:

Remove the funnel and inner collecting tube from your rain gage.

Set out your snowboard in an open location. At observation time:

Snow in the gage must be melted first then measured using the inner tube.

Snowfall is measured directly on the snowboard, then wiped clean for the next day. (Concluded on Page 4)



There were a record 26 named storms this year surpassing the old record of 21 in 1933.

Hurricane Wilma became the strongest hurricane ever in the Atlantic Basin with a pressure of 882 millibars.

There were a record 14 hurricanes with 3 becoming powerful category 5 storms.

Hurricane Katrina is the costliest hurricane on record with damage estimates totaling \$80 billion and this total is expected to rise.

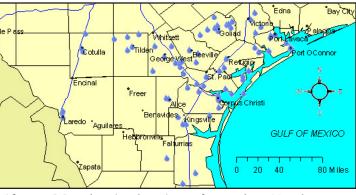
Hurricane Vince is the first known tropical system to make landfall in Spain.

The 2005 season is the first season in which the letters V and W were used to name a storm. The Greek alphbet was also used for the first time.

# **Rainfall Network Update**

by: John Metz

We just wanted to take this opportunity to thank all of our volunteer rainfall observers who have contributed their time and talents in reporting critical rainfall amounts to the NWS in the past year. Over 80 rain gages were installed across south Texas this year. Reports from observers during flooding and severe weather event have already saved lives. We hope to install another 60 gauges in 2006 primarily in the data void regions of LaSalle, Webb, Duval counties. If you know someone



**Above:** Map showing locations of more than 80 volunteer rainfall gauges installed by the National Weather Service in Corpus Christi.

who may want to be a volunteer please let them know about this program.

# Three Rivers Co-op Observer Receives 20-Year Award

by: Steve Smart

On November 1, 2005 Ruth Blaschke received a 20 year length of service award from the National Weather Service for serving as the Cooperative Observer for Three Rivers, Texas. Congratulations and Thank You Ruth!

**Above from Left to Right:** Larry Maifeld, OPL, Ruth Blaschke, Calvin Blaschke, and Scott C. Cordero, Meteorologist-in-Charge.

# New Upper Air System at Corpus Christi NWS

by: Tony Merriman



**Above:** The RRS tracking antenna tracks new GPS sondes and receives data in 1-second increments.

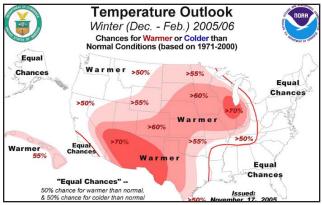
For over 60 years, the NWS has launched weather balloons twice a day to get a three dimensional snapshot of the atmosphere. These snapshots began in Corpus Christi on November 10th, 1989 using the Microcomputer Automatic Radiotheodolite system (MicroART). As time went on, the MicroART equipment became older and the technology became more obsolete. With advancements in modern technology, the NWS began updating the upper-air observation sites with the Radiosonde Replacement System (RRS). The new system allows for more data to be processed for ingest into forecast models, allowing meteorologists to create better forecasts.

NWS Corpus Christi was selected to be the 4th site in the nation to have the RRS installed. The morning of September 25th, 2005 was the last upper-air observation with the old MicroART system. During the week of September 25th, 2005, the old MicroART was decommissioned and the new RRS was installed. The first upper-air observation with the new Radiosonde Replacement System occurred on October 3rd, 2005.

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# Measuring Snow (Concluded)

Snow depth is measured around the location by taking the average of several readings. On your weather form, record the liquid equivalent to the nearest hundredth inch, snowfall to the nearest tenth of an inch and snow depth to the nearest whole inch. This process is repeated each day until snow is no longer on the ground. If you have questions about measuring snow, please contact us at 361-289-0959. Remember, it CAN happen here!



# Precipitation Outlook Winter (Dec. - Feb.) 2005/06 Chances for Wetter or Drier than Normal Conditions (based on 1971-2000) Equal Chances Chances "Equal Chances Chances "Equal Chances" "Equal Chances "E

# Warmer Winter for South Texas?

by: John Metz

The National Weather Service's Climate Prediction Center produces long term forecasts of temperature and rainfall for the United States. The Winter Outlook (Dec-Feb) calls for warmer-than-average temperatures across South Texas. There are equal chances that precipitation will be either above or below normal, meaning there are no strong or consistent climate signals for either a wet or dry winter across South Texas.

Normal high temperatures in January range from the lower 60s in Victoria to the upper 60s in Laredo. Lows average in the low to mid 40s across South Texas in January. Normal precipitation from December through January in Victoria is 6.95 inches, in Corpus Christi 5.21 inches, and in Laredo 2.55 inches.

**Top Image:** Winter Temperature Outlook. Above normal temperatures are expected throughout much of the country. **Bottom Image:** Winter Precipitation Outlook. Drier conditions are expected across most of Florida while the rest of the country will have near normal precipitation.

# Meet the new Meteorologist in Charge of the NWS in Corpus Christi

by: Steve Smart



**Above:** Scott C. Cordero -- New Meteorologist-in-Charge of the National Weather Service office in Corpus Christi.

In September 2005, Scott C. Cordero was newly appointed Meteorologistin-Charge of the National Weather Service (NWS) Weather Forecast Office (WFO) located in Corpus Christi, Texas. Scott brings with him a wealth of knowledge, experience, enthusiasm and vision that will serve the residents south Texas effectively. Scott was born and raised in Chicago, Illinois. It was during the third grade when Scott began his quest to understand weather after a tornado nearly destroyed his grandparent's home. Ultimately, Scott earned a B. S. degree in Atmospheric Sciences from the University of Arizona at Tucson and a M.S. degree in Water Resource

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If you have any questions regarding the South Texas Weather Journal or would like to suggest ways to improve this newsletter, please send them to Jason Dunn via e-mail at:

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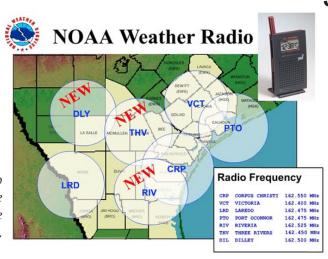
The South Texas Weather Journal is produced by the staff at the Corpus Christi NWS Office and will be published three times a year: spring, summer, and fall/winter seasons

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# Smoke Detector for Weather (Concluded)

give you the ability to only alarm when a warning is issued for your particular county. NOAA Weather Radios can be found at most electronic stores. They are a small price to pay for the safety of you and your family.

Right: Map of NOAA Weather Radio transmitters located across South Texas. Three new transmitters have helped increase coverage across the sparsly populated Rio Grande Plains.



## **New MIC** (Concluded)

Management from the University of Nevada at Las Vegas. Scott's career in the NWS began in 1991 when he worked as a student aide in the Chicago weather office. He served as an intern then became a journeyman forecaster at the NWS office in Las Vegas, NV. From there he served as a lead forecaster at the NWS office in Brownsville, TX. Following this, Scott was the Regional Operations Service Meteorologist for Pacific Region in Honolulu, HI and recently served as the Warning Coordination Meteorologist at the NWS office in Memphis, TN. It's no surprise severe weather and its impact on society is at the heart of Scott's meteorological interests. In fact, Scott is dedicated to ensuring residents receive life-saving weather information using the widest range of communication forms and modern technology available. Scott says, "reaching out to our communities and connecting with the customers and users of our products and services is a top priority!"

When Scott isn't contending with the weather, he enjoys spending time with his wife Edwina and their two young daughters Gabriela and Ysabel. He's an avid sports fan and also dabbles in gardening as time permits.

Please join the NWS staff in welcoming Scott and his family to Corpus Christi, Texas!

by Steve Smart

